REMARKS

Claims 1-14, 16 and 17 have been presented for examination in the above-identified U.S. Patent Application.

Claims 1-4, 16 and 13 have been rejected in the Office Action dated April 3, 2007.

Claims 1, 5, 10-12 and 14 have been amended by this Amendment C.

Claims 2, 3, 6, 8, 16, and 17 have been cancelled by this Amendment C.

Claims 1, 4, 5, 7, and 10-14 are still in the application and reconsideration is hereby respectfully requested.

Referring to Paragraph 1 of the Office Action, Claim 5 has been objected to because of an informality kindly identified by the Examiner. The cited informality, cited by Examiner, has been corrected by this Amendment C. Therefore, objection to Claim 5 has been answered by amendment.

Referring to Paragraph 2, Claims 1-3, 7, 8, and 10 have been rejected under 35 U.S.C. 103(a) as being obvious over U.S. Patent 6,732,206 issued in the name of Jensen et al (hereinafter referred to as Jensen) in view of U.S.

Patent 5,870,628 issued in the name of Chen et al (hereinafter referred to as Chen). Referring to Paragraph 3, Claims 14 and 16 have been rejected as being obvious over Jensen, cited above in view of U.S. Patent 7,002,979 issued in the name of Schneider et al (hereinafter referred to as Schneider). Referring to Paragraph 4, Claim 4 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Jensen (cited above) in view of Chen (cited above) in further view of U.S. Patent 5,941,952 issued in the name of Thomas et al (hereinafter referred to as Thomas). Referring to Paragraph 5, Claim 17 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Jensen, cited above, in view of Schneider, cited above, in further view of Thomas, cited above. Referring to Paragraph 6, Claims 5 and 13 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Jensen, cited above, in view of Chen cited above, in further view of U.S. Patent 6,029,2120 issued in the name of Kessler et al (hereinafter referred to as Kessler). Referring to Paragraph 7 of the Office Action, Claim 6 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Jensen, cited above, in view of Chen, cited above, in further view of Schneider, cited above. Referring to Paragraph 8, Claim 11 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Jensen, cited above, in view of Chen cited above, in further view of Thomas, cited above.

Before addressing the references, the invention, as described by the amended Claims, will be summarized. This invention involves an ATM interface unit that mediates the

exchange of UTOPIA format signals between an ATM master processing unit and at least one ATM slave processing unit, signals that are transmitted over a communication bus. Several problems can arise in the transmission of the signals. The address of a data group forwarded by the transmitting unit may not be the address at which the receiving unit stores the data group. Therefore, the interface unit must accommodate this difference and generate the address appropriate for the receiving processing unit. In addition, the ATM processing units of the present invention include a direct memory access unit to relieve the central processing unit component of much of the burden of dealing with the memory unit. The UTOPIA signal set includes a clock signal. The clock signal results in a synchronization of the signals sent and received over the communication bus. However, because of the physical characteristics of the communication bus, the frequency of the UTOPIA clock signal is at a much lower frequency then the operational frequency of the direct memory access unit, the direct memory access unit operating at the frequency of the central processing unit.

In order to accommodate the difference in frequency between the direct memory access unit (operating a processing unit clock frequency) and the associated interface unit (operating at the UTOPIA clock frequency), the present invention inserts a two stage first-in/first-out storage unit. Note that in the amended Claims, each of the independent Claims 1, 10, and 14 includes the specific

limitation of the two stage first-in/first-out storage unit.

Each of the amended, independent Claims includes the limitation that UTOPIA format signals are used. However, in the transfer to the direct memory access unit from the storage buffer is the result of the application of a READY signal. This READY signal provides for the synchronization between the ATM master processing unit and the direct memory access unit, coupled to the ATM slave processing unit.

Referring to Claims 1, 10 and 14, the independent (amended) Claims remaining in the Application, Examiner has cited the Kessler reference for the use of a two stage first-in/first-out storage register. This reference does show a first-in/first-out buffer storage unit. However, the Kessler reference uses this storage element differently than in the present invention. The storage buffer unit of the Kessler reference is not for providing a frequency interface between the ATM clock and the processor clock. Rather, the storage unit of Kessler provides a temporary storage from which data cells are transferred to appropriate locations. In the present invention, only a READY signal is needed to transfer data group from the buffer storage unit to the direct memory access unit. As indicated in the section of the Kessler reference cited by the Examiner, the buffer storage unit requires control logic (36) and an input from the central processing unit. The description also includes the fact that input from the

central processing unit is required to determine the location to which the contents of the storage register must be forwarded. In the present invention, the inventor has taken advantage of the processing facilities already present in the direct memory access unit to provide a storage unit that operates with less auxiliary equipment and for a different purpose as compared to the cited Kessler reference. Therefore, it is believed that Claims 1, 10, and 14, the independent Claims remaining in the Application, are in condition for allowance.

Consequently, rejection of Claims 1, 10, and 14 under 35 U.S.C. 103(a) over Jensen, Chen, Schneider, or Kessler, either individually or in combination, is respectfully traversed.

In view of the fact that Claims 1, 10, and 14 are believed to be in condition for allowance, it is believed that Claims 4, 5, 7, and 11-13, dependent there from, are also in condition for allowance.

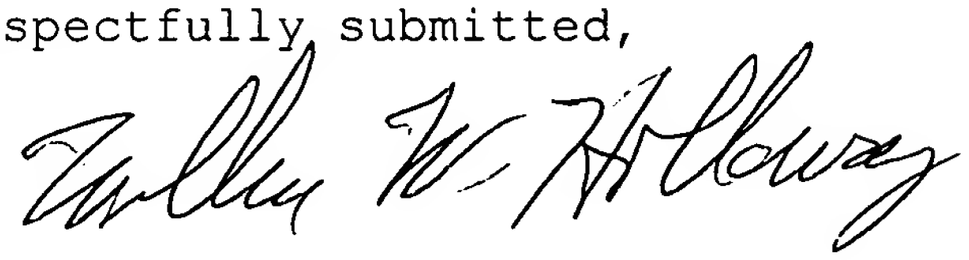
Therefore, rejection of Claims 4, 5, 7, and 11-13 under 35 U.S.C. 103(a), over Jensen, Chen, Schneider, Thomas, and Kessler, either individually or in combination, is respectfully traversed.

CONCLUSIONS

In view of the foregoing discussion and the foregoing amendments, it is believed that Claims 1, 4, 5, 7, and 10-14 are now in condition for allowance of and allowance of Claims 1, 4, 5, 7, and 10-14 is respectfully requested. Applicant hereby respectfully requests a timely Notice of Allowance be issued for this Application.

Should any issues remain that could be resolved by a telephonic interview, Examiner is requested to telephone the undersigned attorney.

Respectfully submitted,



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